

**SES LD SERIES** - THREE PHASE - 6 to 400 kVA

**COST EFFICIENT VOLTAGE STABILIZATION**  
with fast speed of response. High output voltage accuracy and inbuilt energy saving ability.

**FEATURES**

- **Automatic Voltage Regulation**  
Step less automated voltage regulation - ideal for 95% of all applications.
- **Transient Voltage Surge Suppression**  
TVSS - Protects loads against harmful high-energy surges, transients and spikes.
- **Wide Range of Power Ratings**  
Three Phase - 6 to 400 KVA
- **Broad Input Voltage Swing Ranges**  
Input Swing -  $\pm 15\%$  (S15),  $\pm 20\%$  (S20),  $\pm 25\%$  (S25),  $\pm 30\%$  (S30),  $\pm 35\%$  (S35) &  $\pm 40\%$  (S40) - to specify.
- **High Efficiency**  
Better than 98% for low running costs.
- **Precise Output Voltage Regulation**  
Output Voltage Accuracy  $\pm 1\%$



**SERVO ELECTRONIC DESIGN**  
**AC VOLTAGE STABILIZERS & REGULATORS**

**AC - THREE PHASE - 6 TO 400 kVA**

**190V - 200V - 208V - 220V - 240V - 50 or 60Hz**

**SES**

**3 WIRE - NO NEUTRAL**

**LD - THREE PHASE** 

**ENSURING A STABLE AC UTILITY SUPPLY VOLTAGE**

AC utility supply voltage fluctuations can cause equipment to behave erratically and malfunction. Some systems may even break down due to these fluctuations, noise or spikes. Failure to ensure the incoming utility voltage is stable and clean can often result in costly equipment repairs and unscheduled down-time.

**Ashley-Edison AC Voltage Stabilizers offer -**

- **Voltage Stability & Protection**

Suitable for all electrical and electronic equipment, Ashley-Edison's SES AC Voltage Stabilizers continuously monitor the incoming supply. Should the incoming voltage rise or drop, the Stabilizers will automatically control the output to ensure the voltage reaching the load equipment always remains constant at the requisite voltage. Inbuilt spike protection ensures the load is continuously protected against harmful utility supply born high energy spikes and surges.

- **Durability & Dependability**

With an impressively wide range of input voltage window options and precise output voltage regulation, the electro - mechanical / electronic servo design based SES Voltage Stabilizers have repeatedly proven their durability and dependability in some of the world's harshest and most demanding power environments.

- **Energy Efficiency**

Characterized by high efficiency, SES Stabilizers are completely unaffected by power factor and load variations. Able to withstand high instantaneous overloads, SES Stabilizers do not generate any magnetic interference - making them ideal for being located near to sensitive equipment. Through delivering a regulated, stable and optimized voltage to the equipment they support, OSES Stabilizers ensure you only pay for the actual energy you need.

- **Unparalleled Protection and Value**

Unparalleled inbuilt protection features, including the provision of Soft Switch-On as standard on all models, ensures SES AC Voltage Stabilizers deliver, without compromising on technical performance or quality, outstanding value for money.

- **Inbuilt High Overload Capability**  
Ideal for loads with an inherent initial high current draw on start-up.
- **Independent Phase Balancing & Control** Independent phase voltage sensing and control to ensure the individual phase voltages remain stable - regardless of load unbalance .
- **Soft - Switch On / Load Protection**  
Protection of the load from momentary over voltage situations on start-up
- **Over / Low Voltage Protection**  
Ability to automatically shutdown the Voltage Stabiliser in the event of the input supply voltage going outside the input voltage window.
- **Bypass Control Switch**  
Manual Electronic Controls Bypass Facility
- **Phase Failure Protection** Protection of the load in the event of phase failure.
- **Input Circuit Breaker** Standard protection on all models.
- **Front Panel Status Monitoring & Metering** Showing system status with internal output voltmeter with phase selector switch.
- **Compliance with International Standards** Designed, manufactured and supplied to comply with leading international standards.

# SES LD SERIES - THREE PHASE - 6 to 400 kVA

## VOLTAGE CHOICES AVAILABLE

Also available as 4 Wire Solutions  
(with Neutral) - **SES-LY & H SERIES**

### 3 WIRE SOLUTIONS

THREE PHASE (+GROUND/EARTH) - NO NEUTRAL

#### LD SERIES

6 to 400 kVA

Low Voltage Models:

190V, 200V, 208V, 220V & 240V

Other voltages available on individual request / quotation.



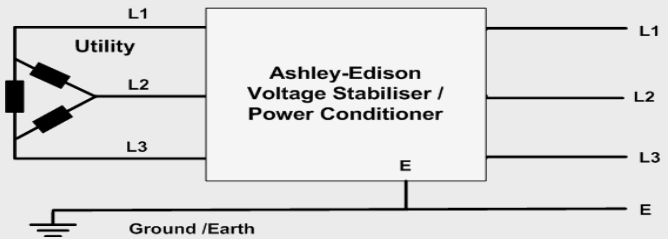
#### HD SERIES

6 to 600 kVA

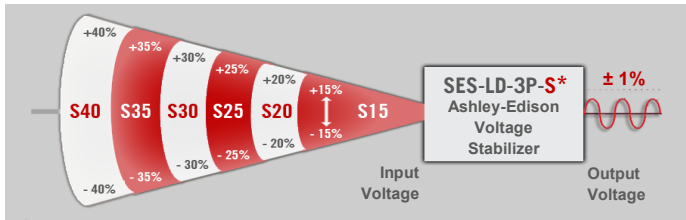
High Voltage Models:

380V, 400V & 415V

**X468** Models: 440V, 460V & 480V



## LD SERIES INPUT VOLTAGE WINDOW OPTIONS



In situations where there is a reasonably good utility supply, a Stabilizer offering an input variation swing of  $\pm 15\%$  (**S15 Models**) will usually be more than acceptable, but in more remote locations, or countries where the national supply infrastructure is less developed, variations of  $\pm 20\%$  or greater may be needed to be accommodated by the Stabilizer. **Please Note** – These Stabilizers are not designed to support / protect voltage “back feed” applications, where energy is required to be also fed back into the utility supply.



### LD SERIES - SES-LD-3P-S\* Input Voltage Windows & Output Accuracy

Nominal Three Phase Voltage	Output Voltage Accuracy $\pm$ % of Nominal	INPUT VOLTAGE SWINGS / SWING MODEL NO VARIANTS S*					
		S15	S20	S25	S30	S35	S40
		6 to 400 kVA	6 to 300 kVA	6 to 250 kVA	6 to 200 kVA	6 to 120 kVA	6 to 120 kVA
190V	$\pm 1\%$	162 to 219V ( $\pm 15\%$ )	152 to 228V ( $\pm 20\%$ )	143 to 238 V ( $\pm 25\%$ )	133 to 247V ( $\pm 30\%$ )	124 to 257V ( $\pm 35\%$ )	114 to 266V ( $\pm 40\%$ )
	$\pm 3\%$	158 to 224V (-17% / +18%)	148 to 234V (-22% / +23%)	139 to 243V (-27% / +28%)	129 to 253V (-32% / +33%)	120 to 262V (-37% / +38%)	110 to 272V (-42% / +43%)
	$\pm 5\%$	154 to 230V (-19% / +21%)	144 to 239V (-24% / +26%)	135 to 249V (-29% / +31%)	125 to 258V (-34% / +36%)	116 to 268V (-39% / +41%)	106 to 277V (-44% / +46%)
200V	$\pm 1\%$	170 to 230V ( $\pm 15\%$ )	160 to 240V ( $\pm 20\%$ )	150 to 250V ( $\pm 25\%$ )	140 to 260V ( $\pm 30\%$ )	130 to 270V ( $\pm 35\%$ )	120 to 280V ( $\pm 40\%$ )
	$\pm 3\%$	166 to 236V (-17% / +18%)	156 to 246V (-22% / +23%)	146 to 256V (-27% / +28%)	136 to 266V (-32% / +33%)	126 to 276V (-37% / +38%)	116 to 286V (-42% / +43%)
	$\pm 5\%$	162 to 242V (-19% / +21%)	152 to 252V (-24% / +26%)	142 to 262V (-29% / +31%)	132 to 272V (-34% / +36%)	122 to 282V (-39% / +41%)	112 to 292V (-44% / +46%)
208V	$\pm 1\%$	177 to 239V ( $\pm 15\%$ )	166 to 250V ( $\pm 20\%$ )	156 to 260V ( $\pm 25\%$ )	146 to 270V ( $\pm 30\%$ )	135 to 281V ( $\pm 35\%$ )	125 to 291V ( $\pm 40\%$ )
	$\pm 3\%$	173 to 245V (-17% / +18%)	162 to 256V (-22% / +23%)	152 to 266V (-27% / +28%)	141 to 277V (-32% / +33%)	131 to 287V (-37% / +38%)	121 to 297V (-42% / +43%)
	$\pm 5\%$	168 to 252V (-19% / +21%)	158 to 262V (-24% / +26%)	148 to 272V (-29% / +31%)	137 to 283V (-34% / +36%)	127 to 293V (-39% / +41%)	116 to 304V (-44% / +46%)
220V	$\pm 1\%$	187 to 253V ( $\pm 15\%$ )	176 to 264V ( $\pm 20\%$ )	165 to 275V ( $\pm 25\%$ )	154 to 286V ( $\pm 30\%$ )	143 to 297V ( $\pm 35\%$ )	132 to 308V ( $\pm 40\%$ )
	$\pm 3\%$	183v to 260v (-17% / +18%)	172 to 271V (-22% / +23%)	161 to 282V (-27% / +28%)	150 to 293V (-32% / +33%)	139 to 304V (-37% / +38%)	128 to 315V (-42% / +43%)
	$\pm 5\%$	178 to 266V (-19% / +21%)	167 to 277V (-24% / +26%)	156 to 288V (-29% / +31%)	145 to 299V (-34% / +36%)	134 to 310V (-39% / +41%)	123 to 321V (-44% / +46%)
240V	$\pm 1\%$	204 to 276V ( $\pm 15\%$ )	192 to 276V ( $\pm 20\%$ )	180 to 300V ( $\pm 25\%$ )	168 to 312V ( $\pm 30\%$ )	156 to 324V ( $\pm 35\%$ )	144 to 336V ( $\pm 40\%$ )
	$\pm 3\%$	199 to 283V (-17% / +18%)	187 to 295V (-22% / +23%)	175 to 307V (-27% / +28%)	163 to 319V (-32% / +33%)	151 to 331V (-37% / +38%)	139 to 343V (-42% / +43%)
	$\pm 5\%$	194 to 290V (-19% / +21%)	182 to 302V (-24% / +26%)	170 to 314V (-29% / +31%)	158 to 326V (-34% / +36%)	146 to 338V (-39% / +41%)	134 to 350V (-44% / +46%)

**TECHNICAL SPECIFICATION**

<b>Technology:</b>	<b>Servo Electronic</b> - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
<b>Input Voltage Swing:</b>	±15% (or -17% +18% or -19% +21%) Three Phase, 3 Wire (+G/E) - <b>NO NEUTRAL</b> .
<b>Output Voltage:</b>	Presetable for any voltage between 190V, 200V, 208V, 220V or 240V - <i>Customer to Specify</i> , Three Phase, 3 Wire. The permissible input voltage swing is relative to the preset output voltage.
<b>Output Accuracy:</b>	± 1%, ± 3% & ± 5% - <i>auto selection based on the input voltage swing.</i>
<b>Frequency:</b>	47 - 65Hz
<b>Response Time:</b>	<1.5ms
<b>Correction Time:</b>	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds
<b>Efficiency:</b>	98%
<b>Power Factor:</b>	Any lagging to 0.95 leading
<b>Surge ratings:</b>	10 x max. current rating for 2 seconds 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes
<b>Surge Suppression:</b>	<b>TVSS</b> - Protects loads against harmful high-energy Spikes and Transient voltages.
<b>Total Harmonic Distortion:</b>	Less than 1%
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.
<b>Environment:</b>	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
<b>Construction:</b>	Enclosures to NEMA 1 Style (IP20) - BS EN 60529.
<b>Paint Color:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards - <i>as updated</i> .
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC and 2006/95/EC (The Low Voltage Directive) in force from January 2007.
<b>Standard Warranty:</b>	Three Years / 36 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker, Over/Low Voltage Protection, Phase Failure Protection, Bypass Control Switch & Voltmeter / Phase Selector Switch (internal).
<b>Optional Accessories:</b>	Output Circuit Breaker, Lightning Surge Protection, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & AquaStop Protective Coating - protection against damp and moisture ingress.
<b>Optional Step-Up Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>SES-LHD SERIES</b> Step-Up AC Voltage Stabilizers / Regulators.
<b>Optional Isolation Transformer:</b>	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see <b>PCS-LD SERIES</b> AC Power Line Conditioners.

**S15 PRODUCT SELECTION TABLE**

MODEL:	Rating KVA	Max Rating @ (Amps per Phase)					Dimensions W x H x D mm	Wt Kg	Enc No
		190V	200V	208V	220V	240V			
SES-6LD-3P-S15	6	18	17	16	15	14	300 x 550 x 590	64	331
SES-10LD-3P-S15	10	30	28	27	26	24	300 x 550 x 590	65	331
SES-15LD-3P-S15	15	45	43	41	39	36	300 x 550 x 590	74	331
SES-20LD-3P-S15	20	60	57	55	52	48	300 x 550 x 590	79	331
SES-25LD-3P-S15	25	75	72	69	65	60	300 x 550 x 590	93	331
SES-30LD-3P-S15	30	91	86	83	78	72	300 x 550 x 590	94	331
SES-35LD-3P-S15	35	106	101	97	91	84	380 x 670 x 780	140	332
SES-40LD-3P-S15	40	121	115	111	104	96	380 x 670 x 780	141	332
SES-45LD-3P-S15	45	136	129	124	118	108	380 x 670 x 780	142	332
SES-50LD-3P-S15	50	151	144	138	131	120	490 x 800 x 990	162	333
SES-55LD-3P-S15	55	167	158	152	144	132	490 x 800 x 990	164	333
SES-60LD-3P-S15	60	182	173	166	157	144	490 x 800 x 990	166	333
SES-75LD-3P-S15	75	227	216	208	196	180	540 x 900 x 1000	225	334
SES-80LD-3P-S15	80	243	230	222	209	192	540 x 900 x 1000	253	334
SES-90LD-3P-S15	90	273	259	249	236	216	540 x 900 x 1000	254	334
SES-100LD-3P-S15	100	303	288	277	262	240	540 x 900 x 1000	255	334
SES-120LD-3P-S15	120	364	346	333	314	288	1000 x 1300 x 580	308	335
SES-150LD-3P-S15	150	456	432	416	393	360	1000 x 1300 x 580	350	335
SES-180LD-3P-S15	180	546	519	499	472	432	1000 x 1300 x 580	500	335
SES-200LD-3P-S15	200	607	577	555	524	481	1000 x 1300 x 580	545	335
SES-250LD-3P-S15	250	759	721	693	655	601	1280 x 1460 x 660	755	336
SES-300LD-3P-S15	300	911	865	832	787	721	1280 x 1460 x 660	830	336
SES-350LD-3P-S15	350	1063	1010	971	918	841	1280 x 1950 x 820	1020	337
SES-400LD-3P-S15	400	1215	1154	1110	1049	962	1280 x 1950 x 820	1030	337

**Note:** Higher KVA and alternative voltage options available to order / individual request.

Optional Accessories added may affect dimensions - subject to confirmation..



**TECHNICAL SPECIFICATION**

<b>Technology:</b>	<b>Servo Electronic</b> - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
<b>Input Voltage Swing:</b>	±20% (or -22% +23% or -24% +26%) Three Phase, 3 Wire (+G/E) - <b>NO NEUTRAL</b> .
<b>Output Voltage:</b>	Presetable for any voltage between 190V, 200V, 208V, 220V or 240V - <i>Customer to Specify</i> , Three Phase, 3 Wire. The permissible input voltage swing is relative to the preset output voltage.
<b>Output Accuracy:</b>	± 1%, ± 3% & ± 5% - <i>auto selection based on the input voltage swing</i> .
<b>Frequency:</b>	47 - 65Hz
<b>Response Time:</b>	<1.5ms
<b>Correction Time:</b>	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds
<b>Efficiency:</b>	98%
<b>Power Factor:</b>	Any lagging to 0.95 leading
<b>Surge ratings:</b>	10 x max. current rating for 2 seconds 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes
<b>Surge Suppression:</b>	<b>TVSS</b> - Protects loads against harmful high-energy Spikes and Transient voltages.
<b>Total Harmonic Distortion:</b>	Less than 1%
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.
<b>Environment:</b>	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
<b>Construction:</b>	Enclosures to NEMA 1 Style (IP20) - BS EN 60529.
<b>Paint Color:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards - <i>as updated</i> .
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC and 2006/95/EC (The Low Voltage Directive) in force from January 2007.
<b>Standard Warranty:</b>	Three Years / 36 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker, Over/Low Voltage Protection, Phase Failure Protection, Bypass Control Switch & Voltmeter / Phase Selector Switch (internal).
<b>Optional Accessories:</b>	Output Circuit Breaker, Lightning Surge Protection, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & AquaStop Protective Coating - protection against damp and moisture ingress.
<b>Optional Step-Up Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>SES-LHD SERIES</b> Step-Up AC Voltage Stabilizers / Regulators.
<b>Optional Isolation Transformer:</b>	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see <b>PCS-LD SERIES</b> AC Power Line Conditioners.

**S20 PRODUCT SELECTION TABLE**

MODEL:	Rating KVA	Max Rating @ (Amps per Phase)					Dimensions, Weights & Enclosure Types
		190V	200V	208V	220V	240V	
SES-6LD-3P-S20	6	18	17	16	15	14	<i>Dimensions, Weights &amp; Enclosure Types available on Request</i>
SES-10LD-3P-S20	10	30	28	27	26	24	
SES-15LD-3P-S20	15	45	43	41	39	36	
SES-20LD-3P-S20	20	60	57	55	52	48	
SES-25LD-3P-S20	25	75	72	69	65	60	
SES-30LD-3P-S20	30	91	86	83	78	72	
SES-35LD-3P-S20	35	106	101	97	91	84	
SES-40LD-3P-S20	40	121	115	111	104	96	
SES-45LD-3P-S20	45	136	129	124	118	108	
SES-50LD-3P-S20	50	151	144	138	131	120	
SES-55LD-3P-S20	55	167	158	152	144	132	
SES-60LD-3P-S20	60	182	173	166	157	144	
SES-75LD-3P-S20	75	227	216	208	196	180	
SES-80LD-3P-S20	80	243	230	222	209	192	
SES-90LD-3P-S20	90	273	259	249	236	216	
SES-100LD-3P-S20	100	303	288	277	262	240	
SES-120LD-3P-S20	120	364	346	333	314	288	
SES-150LD-3P-S20	150	456	432	416	393	360	
SES-180LD-3P-S20	180	546	519	499	472	432	
SES-200LD-3P-S20	200	607	577	555	524	481	
SES-250LD-3P-S20	250	759	721	693	655	601	
SES-300LD-3P-S20	300	911	865	832	787	721	

**Note:** Higher KVA and alternative voltage options available to order / individual request.

Optional Accessories added may affect dimensions - subject to confirmation..



**TECHNICAL SPECIFICATION**

<b>Technology:</b>	<b>Servo Electronic</b> - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
<b>Input Voltage Swing:</b>	±25% (or -27% +28% or -29% +31%) Three Phase, 3 Wire (+G/E) - <b>NO NEUTRAL</b> .
<b>Output Voltage:</b>	Pre-settable for any voltage between 190V, 200V, 208V, 220V or 240V - <i>Customer to Specify</i> , Three Phase, 3 Wire. The permissible input voltage swing is relative to the preset output voltage.
<b>Output Accuracy:</b>	± 1%, ± 3% & ± 5% - <i>auto selection based on the input voltage swing</i> .
<b>Frequency:</b>	47 - 65Hz
<b>Response Time:</b>	<1.5ms
<b>Correction Time:</b>	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds
<b>Efficiency:</b>	98%
<b>Power Factor:</b>	Any lagging to 0.95 leading
<b>Surge ratings:</b>	10 x max. current rating for 2 seconds 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes
<b>Surge Suppression:</b>	<b>TVSS</b> - Protects loads against harmful high-energy Spikes and Transient voltages.
<b>Total Harmonic Distortion:</b>	Less than 1%
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.
<b>Environment:</b>	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
<b>Construction:</b>	Enclosures to NEMA 1 Style (IP20) - BS EN 60529.
<b>Paint Color:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards - <i>as updated</i> .
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC and 2006/95/EC (The Low Voltage Directive) in force from January 2007.
<b>Standard Warranty:</b>	Three Years / 36 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker, Over/Low Voltage Protection, Phase Failure Protection, Bypass Control Switch & Voltmeter / Phase Selector Switch (internal).
<b>Optional Accessories:</b>	Output Circuit Breaker, Lightning Surge Protection, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & AquaStop Protective Coating - protection against damp and moisture ingress.
<b>Optional Step-Up Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>SES-LHD SERIES</b> Step-Up AC Voltage Stabilizers / Regulators.
<b>Optional Isolation Transformer:</b>	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see <b>PCS-LD SERIES</b> AC Power Line Conditioners.

**S25 PRODUCT SELECTION TABLE**

MODEL:	Rating KVA	Max Rating @ (Amps per Phase)					Dimensions, Weights & Enclosure Types
		190V	200V	208V	220V	240V	
SES-6LD-3P-S25	6	18	17	16	15	14	<i>Dimensions, Weights &amp; Enclosure Types available on Request</i>
SES-10LD-3P-S25	10	30	28	27	26	24	
SES-15LD-3P-S25	15	45	43	41	39	36	
SES-20LD-3P-S25	20	60	57	55	52	48	
SES-25LD-3P-S25	25	75	72	69	65	60	
SES-30LD-3P-S25	30	91	86	83	78	72	
SES-35LD-3P-S25	35	106	101	97	91	84	
SES-40LD-3P-S25	40	121	115	111	104	96	
SES-45LD-3P-S25	45	136	129	124	118	108	
SES-50LD-3P-S25	50	151	144	138	131	120	
SES-55LD-3P-S25	55	167	158	152	144	132	
SES-60LD-3P-S25	60	182	173	166	157	144	
SES-75LD-3P-S25	75	227	216	208	196	180	
SES-80LD-3P-S25	80	243	230	222	209	192	
SES-90LD-3P-S25	90	273	259	249	236	216	
SES-100LD-3P-S25	100	303	288	277	262	240	
SES-120LD-3P-S25	120	364	346	333	314	288	
SES-150LD-3P-S25	150	456	432	416	393	360	
SES-180LD-3P-S25	180	546	519	499	472	432	
SES-200LD-3P-S25	200	607	577	555	524	481	
SES-250LD-3P-S25	250	759	721	693	655	601	

**Note:** Higher KVA and alternative voltage options available to order / individual request.

Optional Accessories added may affect dimensions - subject to confirmation..



**TECHNICAL SPECIFICATION**

<b>Technology:</b>	<b>Servo Electronic</b> - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
<b>Input Voltage Swing:</b>	±30% (or -32% +33% or -34% +36%) Three Phase, 3 Wire (+G/E) - <b>NO NEUTRAL</b> .
<b>Output Voltage:</b>	Presetable for any voltage between 190V, 200V, 208V, 220V or 240V - <i>Customer to Specify</i> , Three Phase, 3 Wire. The permissible input voltage swing is relative to the preset output voltage.
<b>Output Accuracy:</b>	± 1%, ± 3% & ± 5% - <i>auto selection based on the input voltage swing</i> .
<b>Frequency:</b>	47 - 65Hz
<b>Response Time:</b>	<1.5ms
<b>Correction Time:</b>	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds
<b>Efficiency:</b>	98%
<b>Power Factor:</b>	Any lagging to 0.95 leading
<b>Surge ratings:</b>	10 x max. current rating for 2 seconds 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes
<b>Surge Suppression:</b>	<b>TVSS</b> - Protects loads against harmful high-energy Spikes and Transient voltages.
<b>Total Harmonic Distortion:</b>	Less than 1%
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.
<b>Environment:</b>	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
<b>Construction:</b>	Enclosures to NEMA 1 Style (IP20) - BS EN 60529.
<b>Paint Color:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards - <i>as updated</i> .
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC and 2006/95/EC (The Low Voltage Directive) in force from January 2007.
<b>Standard Warranty:</b>	Three Years / 36 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker, Over/Low Voltage Protection, Phase Failure Protection, Bypass Control Switch & Voltmeter / Phase Selector Switch (internal).
<b>Optional Accessories:</b>	Output Circuit Breaker, Lightning Surge Protection, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & AquaStop Protective Coating - protection against damp and moisture ingress.
<b>Optional Step-Up Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>SES-LHD SERIES</b> Step-Up AC Voltage Stabilizers / Regulators.
<b>Optional Isolation Transformer:</b>	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see <b>PCS-LD SERIES</b> AC Power Line Conditioners.

**S30 PRODUCT SELECTION TABLE**

MODEL:	Rating KVA	Max Rating @ (Amps per Phase)					Dimensions, Weights & Enclosure Types
		190V	200V	208V	220V	240V	
SES-6LD-3P-S30	6	18	17	16	15	14	<i>Dimensions, Weights &amp; Enclosure Types available on Request</i>
SES-10LD-3P-S30	10	30	28	27	26	24	
SES-15LD-3P-S30	15	45	43	41	39	36	
SES-20LD-3P-S30	20	60	57	55	52	48	
SES-25LD-3P-S30	25	75	72	69	65	60	
SES-30LD-3P-S30	30	91	86	83	78	72	
SES-35LD-3P-S30	35	106	101	97	91	84	
SES-40LD-3P-S30	40	121	115	111	104	96	
SES-45LD-3P-S30	45	136	129	124	118	108	
SES-50LD-3P-S30	50	151	144	138	131	120	
SES-55LD-3P-S30	55	167	158	152	144	132	
SES-60LD-3P-S30	60	182	173	166	157	144	
SES-75LD-3P-S30	75	227	216	208	196	180	
SES-80LD-3P-S30	80	243	230	222	209	192	
SES-90LD-3P-S30	90	273	259	249	236	216	
SES-100LD-3P-S30	100	303	288	277	262	240	
SES-120LD-3P-S30	120	364	346	333	314	288	
SES-150LD-3P-S30	150	456	432	416	393	360	
SES-180LD-3P-S30	180	546	519	499	472	432	
SES-200LD-3P-S30	200	607	577	555	524	481	

**Note:** Higher kVA and alternative voltage options available to order / individual request.

Optional Accessories added may affect dimensions - subject to confirmation..



**TECHNICAL SPECIFICATION**

<b>Technology:</b>	<b>Servo Electronic</b> - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
<b>Input Voltage Swing:</b>	±35% (or -37% +38% or -39% +41%) Three Phase, 3 Wire (+G/E) - <b>NO NEUTRAL</b> .
<b>Output Voltage:</b>	Pre-settable for any voltage between 190V, 200V, 208V, 220V or 240V - <i>Customer to Specify</i> , Three Phase, 3 Wire. The permissible input voltage swing is relative to the preset output voltage.
<b>Output Accuracy:</b>	± 1%, ± 3% & ± 5% - <i>auto selection based on the input voltage swing</i> .
<b>Frequency:</b>	47 - 65Hz
<b>Response Time:</b>	<1.5ms
<b>Correction Time:</b>	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds
<b>Efficiency:</b>	98%
<b>Power Factor:</b>	Any lagging to 0.95 leading
<b>Surge ratings:</b>	10 x max. current rating for 2 seconds 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes
<b>Surge Suppression:</b>	<b>TVSS</b> - Protects loads against harmful high-energy Spikes and Transient voltages.
<b>Total Harmonic Distortion:</b>	Less than 1%
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.
<b>Environment:</b>	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
<b>Construction:</b>	Enclosures to NEMA 1 Style (IP20) - BS EN 60529.
<b>Paint Color:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards - <i>as updated</i> .
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC and 2006/95/EC (The Low Voltage Directive) in force from January 2007.
<b>Standard Warranty:</b>	Three Years / 36 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker, Over/Low Voltage Protection, Phase Failure Protection, Bypass Control Switch & Voltmeter / Phase Selector Switch (internal).
<b>Optional Accessories:</b>	Output Circuit Breaker, Lightning Surge Protection, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & AquaStop Protective Coating - protection against damp and moisture ingress.
<b>Optional Step-Up Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>SES-LHD SERIES</b> Step-Up AC Voltage Stabilizers / Regulators.
<b>Optional Isolation Transformer:</b>	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see <b>PCS-LD SERIES</b> AC Power Line Conditioners.

**S35 PRODUCT SELECTION TABLE**

MODEL:	Rating KVA	Max Rating @ (Amps per Phase)					Dimensions, Weights & Enclosure Types
		190V	200V	208V	220V	240V	
SES-6LD-3P-S35	6	18	17	16	15	14	<i>Dimensions, Weights &amp; Enclosure Types available on Request</i>
SES-10LD-3P-S35	10	30	28	27	26	24	
SES-15LD-3P-S35	15	45	43	41	39	36	
SES-20LD-3P-S35	20	60	57	55	52	48	
SES-25LD-3P-S35	25	75	72	69	65	60	
SES-30LD-3P-S35	30	91	86	83	78	72	
SES-35LD-3P-S35	35	106	101	97	91	84	
SES-40LD-3P-S35	40	121	115	111	104	96	
SES-45LD-3P-S35	45	136	129	124	118	108	
SES-50LD-3P-S35	50	151	144	138	131	120	
SES-55LD-3P-S35	55	167	158	152	144	132	
SES-60LD-3P-S35	60	182	173	166	157	144	
SES-75LD-3P-S35	75	227	216	208	196	180	
SES-80LD-3P-S35	80	243	230	222	209	192	
SES-90LD-3P-S35	90	273	259	249	236	216	
SES-100LD-3P-S35	100	303	288	277	262	240	
SES-120LD-3P-S35	120	364	346	333	314	288	

**Note:** Higher KVA and alternative voltage options available to order / individual request.

Optional Accessories added may affect dimensions - subject to confirmation..



**TECHNICAL SPECIFICATION**

<b>Technology:</b>	<b>Servo Electronic</b> - Variable Transformer controlled, series regulation transformer (buck-boast transformer with secondary wired in series with the load).
<b>Input Voltage Swing:</b>	±40% (or -42% +43% or -44% +46%) Three Phase, 3 Wire (+G/E) - <b>NO NEUTRAL</b> .
<b>Output Voltage:</b>	Pre-settable for any voltage between 190V, 200V, 208V, 220V or 240V - <i>Customer to Specify</i> , Three Phase, 3 Wire. The permissible input voltage swing is relative to the preset output voltage.
<b>Output Accuracy:</b>	± 1%, ± 3% & ± 5% - <i>auto selection based on the input voltage swing</i> .
<b>Frequency:</b>	47 - 65Hz
<b>Response Time:</b>	<1.5ms
<b>Correction Time:</b>	A 10% supply variation will be corrected to within 2.5% in 0.6 seconds
<b>Efficiency:</b>	98%
<b>Power Factor:</b>	Any lagging to 0.95 leading
<b>Surge ratings:</b>	10 x max. current rating for 2 seconds 3 x max. current rating for 1 minute 2 x max. current rating for 2 minutes
<b>Surge Suppression:</b>	<b>TVSS</b> - Protects loads against harmful high-energy Spikes and Transient voltages.
<b>Total Harmonic Distortion:</b>	Less than 1%
<b>Independent Phase Control:</b>	Maintains each phase voltage stable irrespective of load unbalance, even up to 100% load unbalance.
<b>Soft-Switch On:</b>	Ensures the output voltage is set at minimum upon Switch-On before commencing stabilization - protects load equipment from damaging start up voltage surges.
<b>Environment:</b>	Temperature range -15 to 45 °C. Derate by 2% for each additional °C Up to max 60 °C . Suitable for indoor tropical use 95% RH (non-condensing). Maximum altitude 1000m. Derate by 2.5% for each additional 500m.
<b>Construction:</b>	Enclosures to NEMA 1 Style (IP20) - BS EN 60529.
<b>Paint Color:</b>	RAL 7032 (Grey - Epoxy Powder Coating)
<b>EMC Conformance:</b>	Complies with BS EN 55022 and the relevant parts of the BS EN 61000 series of standards - <i>as updated</i> .
<b>CE Conformity:</b>	<b>CE Marked</b> - being fully compliant with European Union Directives 2004/108/EC and 2006/95/EC (The Low Voltage Directive) in force from January 2007.
<b>Standard Warranty:</b>	Three Years / 36 Months from date of supply
<b>Standard Features:</b>	Input Circuit Breaker, Over/Low Voltage Protection, Phase Failure Protection, Bypass Control Switch & Voltmeter / Phase Selector Switch (internal).
<b>Optional Accessories:</b>	Output Circuit Breaker, Lightning Surge Protection, Manual Maintenance Bypass Switch, Ammeter with Phase Selector Switch, No Volt Remote Monitoring Contacts, Digital Power Metering (with RS-485 interface option) & AquaStop Protective Coating - protection against damp and moisture ingress.
<b>Optional Step-Up Voltage Feature:</b>	Ideal for applications where the utility supply voltage is different from the load equipment's requirement - see <b>SES-LHD SERIES</b> Step-Up AC Voltage Stabilizers / Regulators.
<b>Optional Isolation Transformer:</b>	Shielded isolation transformer providing extra protection between the utility and the load. Protects against common and transverse mode electrical noise - see <b>PCS-LD SERIES</b> AC Power Line Conditioners.

**S40 PRODUCT SELECTION TABLE**

MODEL:	Rating KVA	Max Rating @ (Amps per Phase)					Dimensions, Weights & Enclosure Types
		190V	200V	208V	220V	240V	
SES-6LD-3P-S40	6	18	17	16	15	14	<i>Dimensions, Weights &amp; Enclosure Types available on Request</i>
SES-10LD-3P-S40	10	30	28	27	26	24	
SES-15LD-3P-S40	15	45	43	41	39	36	
SES-20LD-3P-S40	20	60	57	55	52	48	
SES-25LD-3P-S40	25	75	72	69	65	60	
SES-30LD-3P-S40	30	91	86	83	78	72	
SES-35LD-3P-S40	35	106	101	97	91	84	
SES-40LD-3P-S40	40	121	115	111	104	96	
SES-45LD-3P-S40	45	136	129	124	118	108	
SES-50LD-3P-S40	50	151	144	138	131	120	
SES-55LD-3P-S40	55	167	158	152	144	132	
SES-60LD-3P-S40	60	182	173	166	157	144	
SES-75LD-3P-S40	75	227	216	208	196	180	
SES-80LD-3P-S40	80	243	230	222	209	192	
SES-90LD-3P-S40	90	273	259	249	236	216	
SES-100LD-3P-S40	100	303	288	277	262	240	
SES-120LD-3P-S40	120	364	346	333	314	288	

**Note:** Higher KVA and alternative voltage options available to order / individual request.

Optional Accessories added may affect dimensions - subject to confirmation..

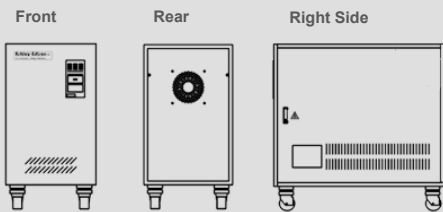




## ENCLOSURE TYPES

### 331 & 332 Enclosures

On Castors

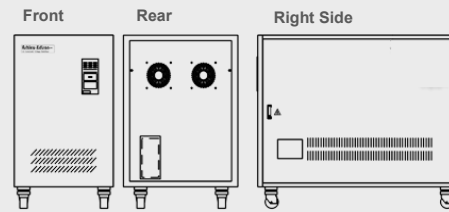


**Physical Size:**

<b>331</b>	11.9"(W) x 21.7"(H) x 23.3"(D) inches	300(W) x 550(H) x 590(D) mm
<b>332</b>	15.0"(W) x 26.4"(H) x 30.8"(D) inches	380(W) x 670(H) x 780(D) mm

### 333 & 334 Enclosures

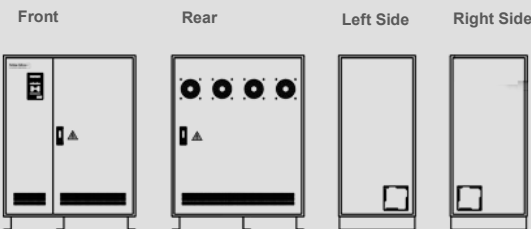
On Castors



**Physical Size:**

<b>333</b>	19.3"(W) x 31.5"(H) x 39.0"(D) inches	490(W) x 800(H) x 990(D) mm
<b>334</b>	21.3"(W) x 35.5"(H) x 39.4"(D) inches	540(W) x 900(H) x 1000(D) mm

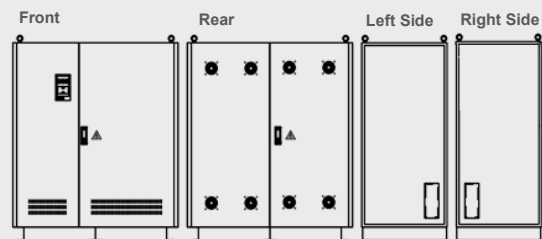
### 335 Enclosure



**Physical Size:**

<b>335</b>	39.4"(W) x 51.2"(H) x 22.9"(D) inches	1000(W) x 1300(H) x 580(D) mm
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### 336, 337 & 338 Enclosures



**Physical Size:**

<b>336</b>	50.4"(W) x 58.3"(H) x 26.0"(D) inches	1280(W) x 1480(H) x 660(D) mm
<b>337</b>	50.4"(W) x 76.8"(H) x 32.3"(D) inches	1280(W) x 1950(H) x 820(D) mm
<b>338</b>	50.4"(W) x 76.8"(H) x 47.3"(D) inches	1280(W) x 1950(H) x 1200(D) mm

## TYPICAL APPLICATIONS

- Computers & Network Systems
- Medical Equipment
- Electronics Equipment
- Testing Equipment
- Laboratory Equipment
- POS Systems
- Process Control Systems
- TV/Radio Broadcasting Stations
- Audio/Video Systems
- Security Systems
- Elevators / Lifts
- CNC & SMT Equipment

## AVAILABILITY

We offer probably the best availability on AC Voltage Stabilizer & Power Conditioning solutions.

Many of our most popular ratings are readily available from stock at the factory or from one of our strategically located Service and Distribution Hubs. Where a solution is not readily available, due to our considerable investment in component inventory and fine-tuned accredited build processes, we are able to ensure very short lead times on deliveries – even for the largest of models!

### WANT TO KNOW MORE . . . . .

Want to learn more about our Servo Electronic AC Voltage Regulators / Stabilizers and Power Conditioners?

Please ask for a copy of our . . . .  
**Servo Electronic Overview Brochure**



## CUSTOM BUILT SOLUTIONS

Ashley-Edison, with a strong and wide manufacturing base, is able to meet the requirements of customers from our own in-house professional resources.

Where bespoke / custom built solutions are required we are able to call upon our extensive portfolio of proven standard designs and tailor offerings to accommodate, without breaking the bank, most individual specific requirements.

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